

Abstract of the Disclosure

A disk type D.C. motor having a non-ferrous stator includes a rotor attached perpendicular to the axis of a motor shaft rotatable with respect to a motor case. An even plurality of permanent magnets are encased in the rotor and are oriented such that in a radial view they show sequentially alternating pole face polarities. A number of pairs of pole pieces corresponding to the number and spacing of the magnets are mounted to the case in a radial distribution such that the pairs of pole pieces face each other. The pairs of pole pieces are positioned on opposite sides of, and firmly in contact with, a core and are also in close proximity to, but not in contact with, the rotor. A coil is wound around the core and between each of the pairs of pole pieces such that an electric current flowing in each of the coils induces a magnetic north-south polarity in each of the pairs of pole pieces. Driving circuitry for selectively applying voltage pulses to each of the coils permits the speed of the motor to be varied.